

Hazards

-Similar to Arc Welding

-**Heat**. The process is so fast you can forget the metal is now extremely hot

-**Electrical**. Watch for frays in the torch leads—it holds gas & electricity.

MIG Welding 101

MIG stands for Metal Inert Gas.

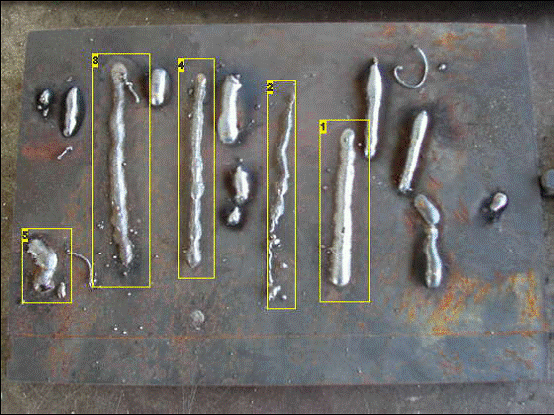
It works by mechanically feeding wire to the torch. Also going to the torch is an inert gas. Pulling the trigger electrifies the wire and feeds gas. Just like Arc welding, the electricity melts your work and provides filler metal. And the gas provides a shielded environment.

* MIG is typically considered the easiest of the types of welding. As a result, you will very quickly feel **over-confident** welding. I hate to say it, but you’ll think you’re doing great work because it looks so much better than Arc or gas … but it may not be functional.
* Always practice on a similar piece of metal to confirm the settings are correct.
* Always check your welds when you are done.
  + The primary flaw is not providing enough penetration. Though it looks good, it won’t because the filler metal is only on the surface.

Settings

Always remember to turn on the gas. Forgetting to do so will result in a weld with visible bubbles.

* **Wire Speed**: Reference the machine. And, listen while practicing for a bacon sizzle.
* **Voltage**: Reference the machine. And, look at the back side of your weld for good penetration.



Habits

* Hold the torch with two hands
* Keep the tip clean
* Cut wire short before starting
* Practice on similar metal first
* Take it slow, moving between both pieces being welded
* Watch what you are doing—as always, focus on the puddle
* Tack your work together before welding a long seam

Image Notes1. These settings are pretty good.  
2. Not enough power, not enough wire feed.  
3 & 4. Good wire feed, not enough power.   
5. It takes a little while to get comfortable, don't be afraid to make some test welds to get a feel for it.